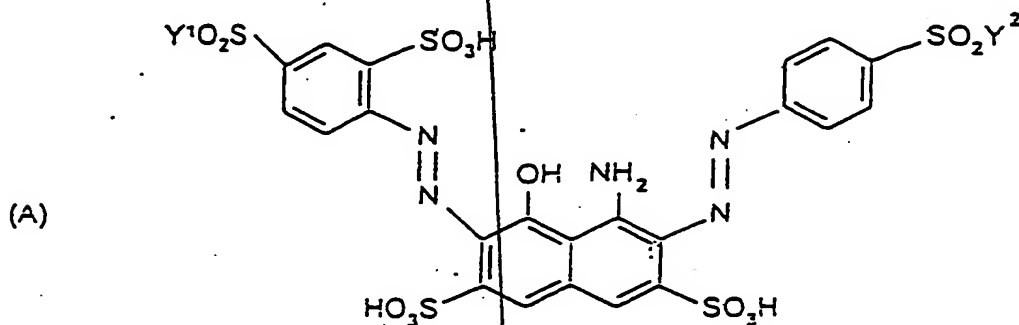


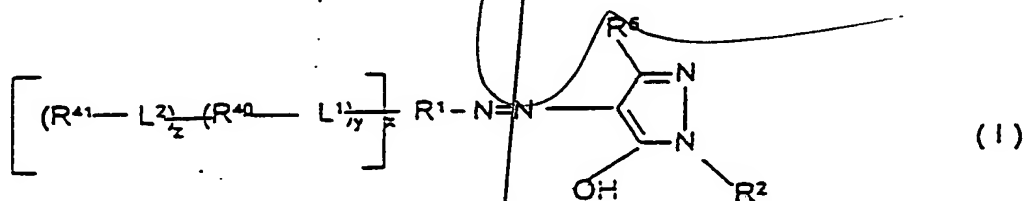
CLAIMS

1. A dye mixture comprising,  
as component (A), a reactive dye of the formula (A)



wherein each of  $Y^1$  and  $Y^2$ , independently, is a vinyl group  
or a group of the formula  $-CH_2CH_2Q$  in which  $Q$  is a leaving  
group removable under alkaline conditions to provide a vinyl  
group; and,

as component (B), at least one reactive dye selected from  
(I) a monoazopyrazole dye of the formula



wherein:  $R^1$  is an aryl group selected from phenyl and naphthyl  
groups optionally having at least one substituent thereon, the  
substituents, or each substituent independently, being  
selected from a sulphonic acid group and a salt thereof, a

C<sub>1-4</sub> alkyl group, a C<sub>1-4</sub>alkoxy group, a hydroxy group, a carboxyl group, a chlorine atom, a vinyl sulphonyl group and a group SO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Q<sup>1</sup> in which Q<sup>1</sup> is a leaving group removable under alkaline conditions to provide a vinyl sulphonyl group;

R<sup>2</sup> is a phenyl or naphthyl group, optionally having at least one substituent thereon, the substituent, or each substituent, independently, being selected from a sulphonic acid group and a salt thereof, a C<sub>1-4</sub>alkyl group, a C<sub>1-4</sub>alkoxy group, a hydroxy group, a chlorine atom, a vinyl sulphonyl group, a group SO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Q<sup>2</sup> in which Q<sup>2</sup> is a leaving group removable under alkaline conditions to provide a vinyl sulphonyl group, a group Het and a group L<sup>5</sup>-Het, where Het is an optionally substituted aromatic heterocyclic reactive or non-reactive group or a reactive or non-reactive group having an aliphatic chain and L<sup>5</sup> is as defined below; and

R<sup>6</sup> is a methyl group, an amide group or a carboxyl group or a salt thereof;

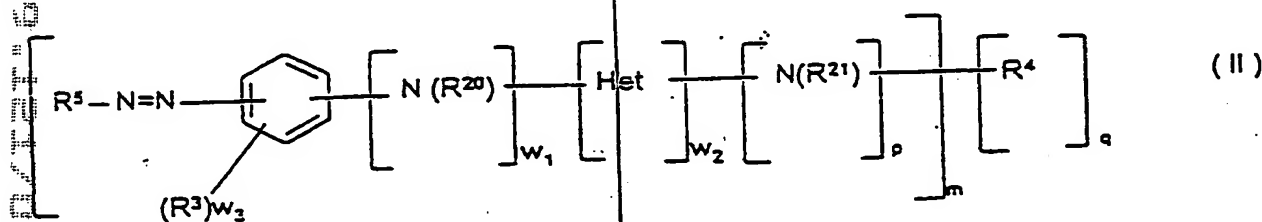
each of R<sup>40</sup> and R<sup>41</sup>, independently, is an aryl group selected from phenyl and naphthyl groups, each of which, independently, is optionally substituted by a vinylsulphonyl group, a group SO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Q<sup>1</sup> in which Q<sup>1</sup> is a leaving group removable under alkaline conditions to provide a vinylsulphonyl group; or the group Het, where Het is as defined above;

at least one of  $R^1$ ,  $R^2$ ,  $R^{40}$  and  $R^{41}$  being, or having thereon at least one substituent which is, reactive;

each of  $L^1$ ,  $L^2$  and  $L^5$  independently is a linking group selected from  $N(R^{20})$ , in which  $R^{20}$  is hydrogen or  $C_{1-4}$  alkyl;  $C(=O)$ ;  $C(=O)-O$ ;  $S(=O)_2$ ;  $S(=O)-NH$ ;  $C(=O)-NH$ ; and  $NHC(=O)NH$ ; and

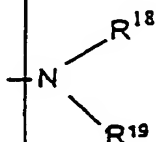
each of  $x$ ,  $y$  and  $z$ , independently, is zero or 1; and, when the group  $R^1$  is substituted by a hydroxy group ortho to the azo group, a metallized derivative thereof;

(II) a monoazo or disazo dye of the formula



wherein: Het is an optionally substituted aromatic heterocyclic reactive or non-reactive group or a reactive or non-reactive group having an aliphatic chain;

$R^3$  or each  $R^3$ , independently, is a chlorine atom, a methyl group, a methoxy group, a sulphonic acid group or a salt thereof, or is an amino group of the formula



in which each of  $R^{18}$  and  $R^{19}$ , independently, is hydrogen, chloro, methyl, ( $C_{1-4}$  alkyl)carbonyl, aminocarbonyl, vinylsulphonyl or a group  $SO_2CH_2CH_2Q^1$ , in which  $Q^1$  is as defined above;

$R^4$ , or each  $R^4$  independently, is hydrogen, a sulphonic acid group or a salt thereof, a  $C_{1-8}$  alkyl group, a  $C_{1-4}$  alkoxy group, a vinyl sulphonyl group or a group  $SO_2CH_2CH_2Q^2$  in which  $Q^2$  is a leaving group removable under alkaline conditions to provide a vinyl sulphonyl group, which  $C_{1-4}$  alkyl group or  $C_{1-4}$  alkyl moiety of the  $C_{1-4}$  alkoxy group is optionally interrupted by an oxygen atom to provide an ether group and is optionally substituted by a vinyl sulphonyl group or a group  $SO_2CH_2CH_2Q^2$ , in which  $Q^2$  is as defined above; or  $R^4$  (or when  $q$  is 2, each  $R^4$  independently) is a phenyl group optionally substituted by at least one sulphonic acid group or a salt thereof or at least one group Het, where Het is as defined above; or  $R^4$  is a group Het, where Het is as defined above;

$R^5$  is an aryl group selected from phenyl and naphthyl groups each optionally substituted by at least one sulphonic acid group or a salt thereof or at least one group Het, as defined above;

$R^{20}$  is a hydrogen atom or a  $C_{1-4}$  alkyl group;

$R^{21}$  is a hydrogen atom, a  $C_{1-4}$  alkyl group, a sulphonic acid- $C_{1-4}$  alkyl group, a chloroalkylsulphonyl- $C_{1-4}$  alkyl group or a group Het, where Het is as defined above;

m is 1 or 2;

p is zero, 1 or 2;

q is zero, 1 or 2;

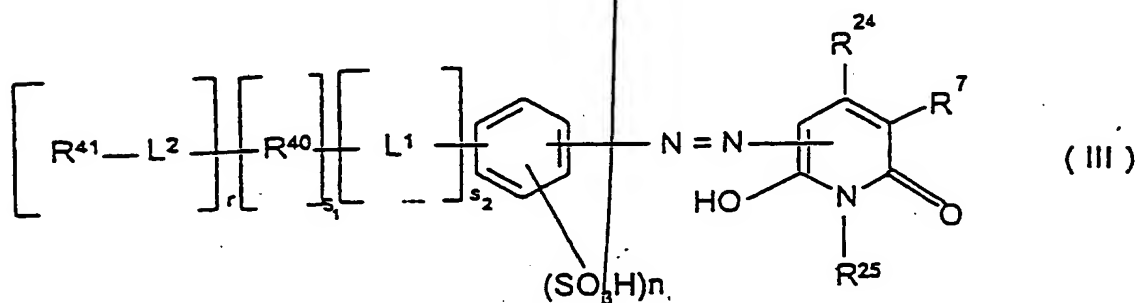
each of  $w_1$  and  $w_2$  is zero or 1; and

$w_3$  is 1, 2 or 3; and

when p is zero, q is zero;

at least one of  $R^4$ ,  $R^5$ ,  $R^{18}$ ,  $R^{19}$ ,  $R^{21}$  and Het being, or having thereon at least one substituent which is, reactive.

(III) a monoazopyridone dye of the formula



wherein: each of  $R^{40}$ ,  $R^{41}$ ,  $L^1$  and  $L^2$  is as defined above;

$R^7$  is optionally present, and is a cyano group or the group  $-CH_2SO_3H$  or the group  $-C(=O)NH_2$ ;

each of  $R^{24}$  and  $R^{25}$ , independently, is a hydrogen atom, a  $C_{1-4}$  alkyl group, a sulpho- $C_{1-4}$  alkyl group, or a carboxyl group;

n is 1 or 2;

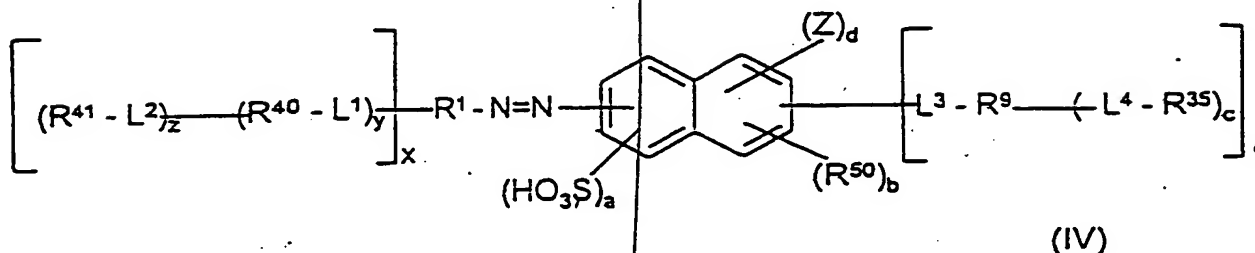
r is zero or 1; and

each of  $s_1$  and  $s_2$  is zero or 1; and when  $R^{40}$  is a phenyl or naphthyl group  $s_2$  is 1;

at least one of  $R^{40}$  and  $R^{41}$  being, or having thereon

at least one substituent which is, reactive;

(IV) a monoazonaphthyl dye of the formula



wherein: each of  $R^1$ ,  $R^{40}$ ,  $R^{41}$ ,  $L^1$ ,  $L^2$ ,  $x$ ,  $y$  and  $z$  is as defined above;

$R^9$  is  $CH_3(C=O)-$ , Het (as defined above) or an aryl group selected from phenyl and naphthyl, which Het or aryl group is optionally substituted by at least one substituent, the or each substituent, independently, being selected from a sulphonic acid group and a salt thereof, a  $C_{1-4}$  alkyl group, a  $C_{1-4}$  alkoxy group, a hydroxy group, an amino group optionally substituted by at least one methyl or sulphato group, a vinyl sulphonyl group and a group  $SO_2CH_2CH_2Q^1$  in which  $Q^1$  is as defined above;

$R^{35}$  is a  $C_{1-4}$  alkyl or  $C_{2-4}$  alkenyl group, which  $C_{1-4}$  alkyl or  $C_{2-4}$  alkenyl group is optionally substituted by at least one halogen atom, a sulphonic acid group or salt thereof, a chloroalkylsulphonyl group, a vinylsulphonyl group or  $-SO_2CH_2CH_2Q^1$ , where  $Q^1$  is as defined above and which  $C_{1-4}$  alkyl or  $C_{2-4}$  alkenyl group optionally additionally contains at least one oxygen or sulphur atom in the chain thereof; the

group Het (as defined above); or an aryl group selected from phenyl and naphthyl, which Het or aryl group is optionally substituted by at least one substituent, the substituent or each substituent independently, being selected from a sulphonic acid group and a salt thereof, a C<sub>1-4</sub> alkyl group, a C<sub>1-4</sub> alkoxy group, a halogen atom, a hydroxy group, an amino group optionally substituted by at least one methyl or sulphato group, a vinylsulphonyl group, a vinylsulphonyloxyethyl group and a group SO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Q<sup>1</sup> in which Q<sup>1</sup> is as defined above;

R<sup>50</sup> is a vinylsulphonyl group or a group SO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Q<sup>1</sup> (in which Q<sup>1</sup> is as defined above);

at least one of R<sup>1</sup>, R<sup>9</sup>, R<sup>35</sup>, R<sup>40</sup>, R<sup>41</sup> and R<sup>50</sup> is, or has thereon at least one substituent which is, reactive;

L<sup>3</sup> is a linking group selected from N(R<sup>20</sup>), in which R<sup>20</sup> is as defined above, CO; COO; NHCO; NHCONH; SO<sub>2</sub>NH and SO<sub>2</sub>;

L<sup>4</sup> is a linking group selected from N(R<sup>21</sup>), in which R<sup>21</sup> is as defined above, CO, COO, NHCO, NHCONH, SO<sub>2</sub>NH and SO<sub>2</sub>;

Z is hydroxy, amino or methylamino;

a is zero or 1-4;

b is zero or 1-3;

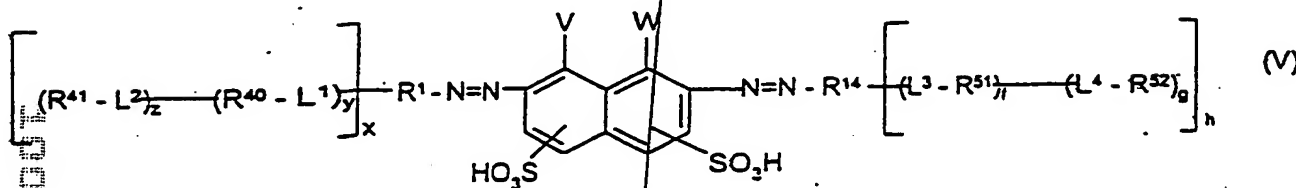
c is zero or 1;

d is zero, 1 or 2;

e is zero or 1; and

when each of R<sup>1</sup> and Z provides a hydroxyl group ortho to the azo group, a metallized derivative thereof;

(V) a disazoaminonaphthyl dye of the formula



wherein: each of R<sup>1</sup>, R<sup>40</sup>, R<sup>41</sup>, L<sup>1</sup>, L<sup>2</sup>, x, y and z is as defined above;

each of V and W, independently, is NH<sub>2</sub> or OH;

R<sup>14</sup> is an aryl group selected from phenyl and naphthyl groups optionally having at least one substituent thereon, the substituents, or each substituent independently, being selected from a sulphonic acid group and a salt thereof, a C<sub>1-4</sub> alkyl group, a C<sub>1-4</sub> alkoxy group, a hydroxy group, a vinyl sulphonyl group, a group SO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Q<sup>1</sup> in which Q<sup>1</sup> is a leaving group removable under alkaline conditions to provide a vinyl sulphonyl group;

each of R<sup>51</sup> and R<sup>52</sup> independently is an aryl group



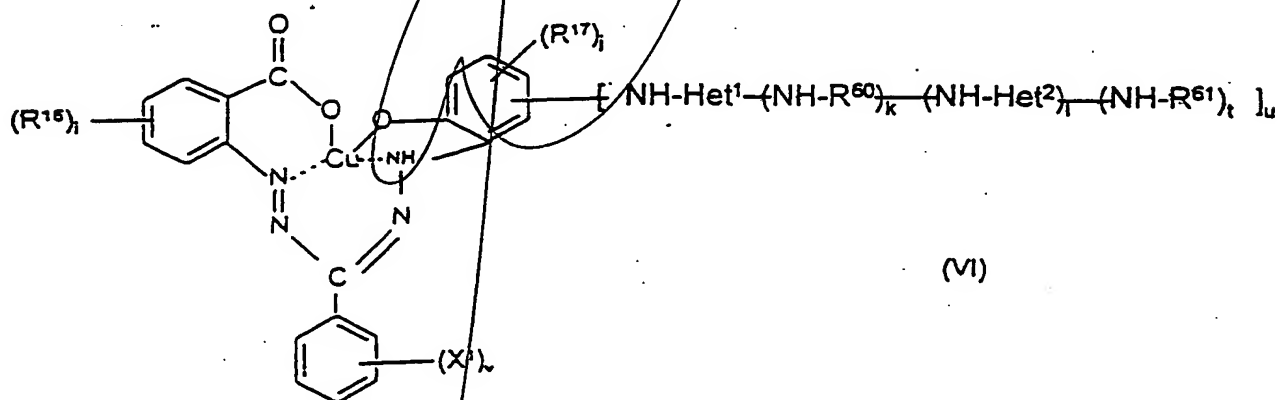
selected from phenyl and naphthyl groups each of which is optionally substituted by a vinyl sulphonyl group, a group  $\text{SO}_2\text{CH}_2\text{CH}_2\text{Q}^1$  in which  $\text{Q}^1$  is a leaving group removable under alkaline conditions to provide a vinyl sulphonyl group, or the group  $\text{Het}^3$ , where  $\text{Het}^3$  is an optionally substituted aromatic heterocyclic reactive group or a reactive group having an aliphatic chain;

each of  $\text{L}^3$  and  $\text{L}^4$ , independently, is a linking group selected from  $\text{N}(\text{R}^{20})$ , in which  $\text{R}^{20}$  is hydrogen or  $\text{C}_{1-4}$  alkyl;  $\text{C}(=\text{O})$ ;  $\text{C}(=\text{O})-\text{O}$ ;  $\text{S}(=\text{O})_2$ ;  $\text{S}(=\text{O})-\text{NH}$ ;  $\text{C}(=\text{O})-\text{NH}$ ; and  $\text{NHC}(=\text{O})\text{NH}$ ;

each of  $f$ ,  $g$  and  $h$ , independently is zero or 1; and

at least one of  $\text{R}^{14}$ ,  $\text{R}^{15}$ ,  $\text{R}^{16}$ ,  $\text{R}^{17}$  and  $\text{R}^{18}$  is, or has thereon at least one substituent which is, reactive.

(VI) a formazan dye of the formula



wherein: each of  $\text{R}^{16}$  and  $\text{R}^{17}$  independently of one another,

each  $R^{16}$  independently of one another and each  $R^{17}$  independently of one another, is a sulphonic acid group or a salt thereof, a vinyl sulphonyl group or a group  $SO_2CH_2CH_2Q^1$  in which  $Q^1$  is a leaving group removable under alkaline conditions to provide a vinyl sulphonyl group;

each of  $Het^1$  and  $Het^2$ , independently, is an optionally substituted aromatic heterocyclic reactive or non-reactive group or a reactive or non-reactive group having an aliphatic chain; and

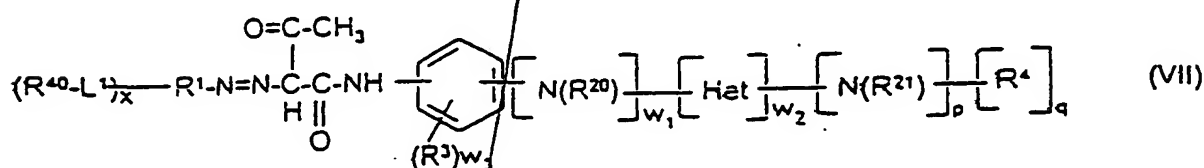
each of  $R^{60}$  and  $R^{61}$ , independently, is an aryl group selected from phenyl and naphthyl groups each of which is optionally substituted by a sulphonic acid group or a salt thereof, a vinylsulphonyl group or a group  $SO_2CH_2CH_2Q^1$  in which  $Q^1$  is as defined above;

$X^1$  is a sulphonic acid group or a salt thereof or halogen; each of  $i$ ,  $j$  and  $v$ , independently, is zero, 1 or 2; and each of  $k$ ,  $l$ ,  $t$  and  $u$ , independently, is zero or 1; and

at least one of  $R^{16}$ ,  $R^{17}$ ,  $R^{50}$ ,  $R^{51}$ ,  $Het^1$  and  $Het^2$  is, or has thereon at least one substituent which is, reactive;

(VII)

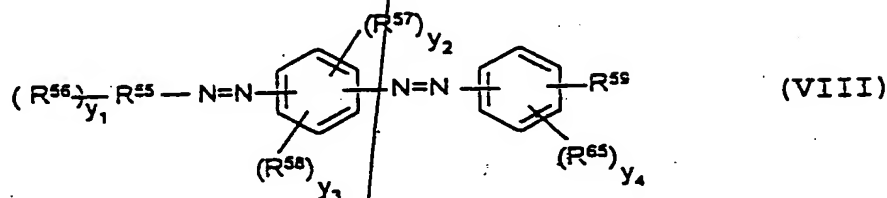
a dye of the formula



wherein: each of  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^{20}$ ,  $R^{21}$ ,  $R^{40}$ ,  $L^1$ , Het, x, p, q,  $w_1$ ,  $w_2$  and  $w_3$  is as defined above; and

at least one of  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^{21}$ ,  $R^{40}$  and Het is, or has thereon at least one substituent which is, reactive;

(VIII) a disazo dye of the formula



wherein  $R^{55}$  is an aryl group selected from phenyl and naphthyl groups;

$R^{56}$  is a sulphonic acid group or a salt thereof or a reactive group selected from a vinyl sulphonyl group and a group  $SO_2CH_2CH_2Q^1$  in which  $Q^1$  is a leaving group removable under alkaline conditions to provide a vinyl sulphonyl group;

$R^{57}$  is an amino group or a group  $NHR^A$  in which  $R^A$  is a  $C_{1-4}$  alkyl group;

$R^{58}$  is a sulphonic acid group or a salt thereof;

$R^{59}$  is a sulphonic acid group or a salt thereof, a reactive group selected from a vinyl sulphonyl group and a group  $SO_2CH_2CH_2Q^2$  in which  $Q^2$  is a leaving group removable under alkaline conditions to provide a vinyl sulphonyl group; or the

group  $R^{59}$  is a group Het or a group  $L^{10}$ -Het, where Het is an optionally substituted aromatic heterocyclic reactive or non-reactive group;

$R^{65}$  is a ureido group or a group  $HNC(=O)R^B$  in which  $R^B$  is a  $C_{1-4}$  alkyl group;

$L^{10}$  is a linking group selected from  $N(R^{20})$ , in which  $R^{20}$  is hydrogen or  $C_{1-4}$  alkyl;  $C(=O)$ ;  $C(=O)-O$ ;  $S(=O)_2$ ;  $S(=O)-NH$ ;  $C(=O)-NH$ ; and  $NHC(=O)NH$ ;

$y_1$  is zero, 1, 2 or 3;

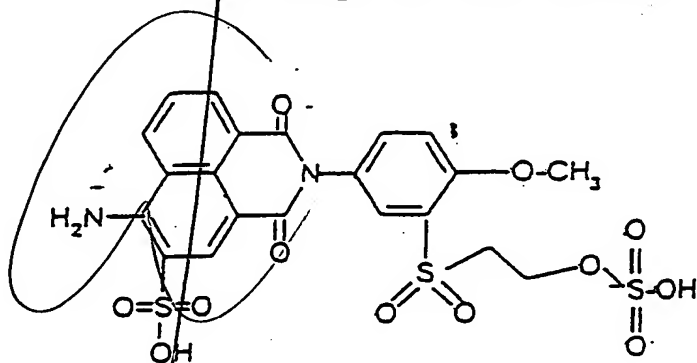
$y_2$  is zero, 1 or 2;

$y_3$  is zero or 1; and

$y_4$  is zero or 1; and

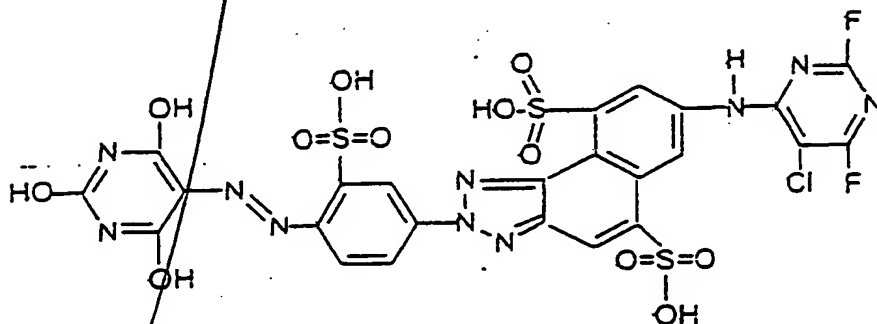
at least one of  $R^{56}$  and  $R^{59}$  is a reactive group.

(IX) a dye of the formula



(33)

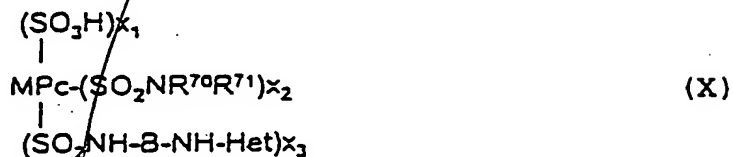
or



(39)

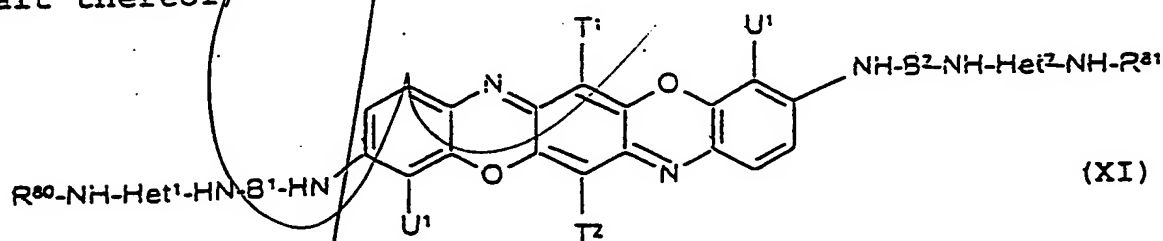
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(X) a metal phthalocyanine dye of the formula



wherein: MPc is a metallophthalocyanine chromophore;  
 each of  $\text{R}^{70}$  and  $\text{R}^{71}$ , independently, is hydrogen or  $\text{C}_{1-4}$  alkyl;  
 B is a hydrocarbon bridging group;  
 Het is a reactive heterocyclic group;  
 each of  $x_1$ ,  $x_2$  and  $x_3$  is a respective average value;  
 $x_1 + x_2 + x_3 = 4$ ;  
 $x_1$  is at least 1  
 $x_2$  is zero or 1; and  
 $x_3$  is at least 1; and

(XI) a triphenodioxazine dye of the formula (XI) (or a salt thereof)



wherein: each of  $\text{B}^1$  and  $\text{B}^2$ , independently, is a hydrocarbon bridging group;

$\text{U}^1$  is H or  $\text{SO}_3\text{H}$ ; and

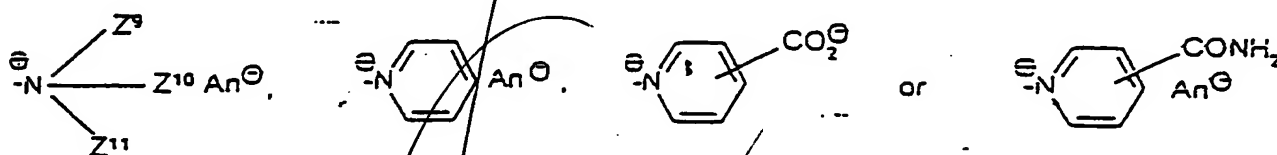
each of  $T^1$  and  $T^2$ , independently, is halo,  $C_{1-4}$  alkyl, or  $C_{1-4}$  alkoxy;

each of  $R^{80}$  and  $R^{81}$  is a phenyl group substituted by at least one sulphonic acid group or a salt thereof;

each of  $Het^1$  and  $Het^2$  is as defined above; and

at least one of  $Het^1$  and  $Het^2$  is a reactive group.

2. A dye mixture according to claim 1, wherein, in the dye of the formula (A), at least one of  $Y^1$  and  $Y^2$  is the group  $-CH_2CH_2Q$  and  $Q$  is selected from chlorine, bromine,  $C_{1-4}$ -alkylsulfonyl, phenylsulfonyl,  $OSO_3H$ ,  $SSO_3H$ ,  $OP(O)(OH)_2$ ,  $C_{1-4}$ -alkylsulfonyloxy, phenylsulfonyloxy, ( $C_{1-4}$  alkyl) carbonyloxy, ( $C_{1-4}$  dialkyl) amino or a radical of the formula



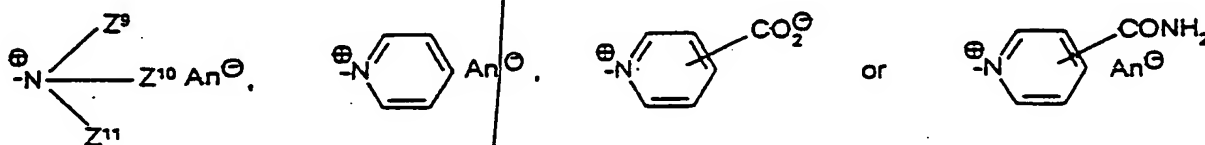
where  $Z^9$ ,  $Z^{10}$  and  $Z^{11}$  are identical or different and are each, independently of one another,  $C_{1-4}$  alkyl or benzyl and  $An^{\ominus}$  is in each case one equivalent of an anion.

3. A dye mixture according to claim 2, in which, in the reactive dye of the formula (A), each of  $Y^1$  and  $Y^2$  is the group  $HO_2SOCH_2CH_2$ .

4. A dye mixture according to any preceding claim, wherein the reactive dye (B) contains a group Het, where Het is an optionally substituted aromatic heterocyclic reactive group derived from a halogen-substituted heterocyclic compound selected from 1,3,5-triazine, quinoxaline, phthalazine, pyrimidine, pyridazine and 2-(C<sub>1-4</sub> alkylsulphonyl) benzothiazole.
5. A dye mixture according to claim 4, wherein the aromatic heterocyclic reactive group is substituted and at least one substituent is a halogen atom.
6. A dye mixture according to any one of claims 1 to 3, wherein the reactive dye (B) contains a group Het, where Het is a reactive group having an aliphatic chain and selected from acryloyl, mono-, di- or trichloroacryloyl, mono-, di- or tri- bromoacryloyl, -CO-CCl=CH-COOH, -CO-CH=CCl-COOH, 2-chloropropionyl, 1,2-dichloropropionyl, 1,2-dibromopropionyl, 3-phenylsulfonylpropionyl, 3-methylsulfonylpropionyl, 2-sulfatoethylaminosulfonyl, 2-chloro-2,3,3-trifluorocyclobutylcarbonyl, 2,2,3,3-tetrafluorocyclobutylcarbonyl, 2,2,3,3-tetrafluorocyclobutylsulfonyl, 2-(2,2,3,3-tetrafluorocyclobutyl)acryloyl, 1- or 2-alkyl- or 1- or 2-arylsulfonylacryloyl, or a radical of the formula SO<sub>2</sub>-Y<sup>3</sup>, SO<sub>2</sub>NH-Y<sup>3</sup>, CONH-L<sup>6</sup>-SO<sub>2</sub>-Y<sup>3</sup> or NECONH-L<sup>6</sup>-SO<sub>2</sub>-Y<sup>3</sup> where L<sup>6</sup> is C<sub>1</sub>-C<sub>4</sub>-alkylene or phenylene and Y<sup>3</sup> is a vinyl group or a group of the

formula  $\text{CH}_2\text{CH}_2\text{Q}^3$  in which  $\text{Q}^3$  is a leaving group removable under alkaline conditions to provide a vinyl group.

7. A dye mixture according to any preceding claim, wherein the reactive dye (B) has at least one of the groups  $\text{Q}^1$  and  $\text{Q}^2$  therein and the or each of groups  $\text{Q}^1$  and  $\text{Q}^2$  independently is selected from chlorine, bromine,  $\text{C}_{1-4}$ -alkylsulfonyl, phenylsulfonyl,  $\text{OSO}_3\text{H}$ ,  $\text{SSO}_3\text{H}$ ,  $\text{OP}(\text{O})(\text{OH})_2$ ,  $\text{C}_{1-4}$ -alkylsulfonyloxy, phenylsulfonyloxy,  $(\text{C}_{1-4}$  alkyl)carbonyloxy,  $(\text{C}_{1-4}$  dialkyl)amino or a radical of the formula



where  $\text{Z}^9$ ,  $\text{Z}^{10}$  and  $\text{Z}^{11}$  are identical or different and are each, independently of one another,  $\text{C}_{1-4}$ -alkyl or benzyl and  $\text{An}^{\ominus}$  is in each case one equivalent of an anion.

8. A dye mixture according to any preceding claim, wherein the reactive dye (B) is a monoazopyrazole dye of the formula (I), given and defined in claim 1.

9. A dye mixture according to claim 8, wherein, in the reactive dye (B) of the formula (I), at least one of the group  $[(\text{R}^{41}-\text{L}^2), (\text{R}^{40}-\text{L}^1)]$  and the group  $\text{R}^2$  has a group  $-\text{SO}_2\text{CH}_2\text{SO}_2\text{Q}^2$  substituted thereon,  $\text{Q}^2$  being as defined in claim 1.



10. A dye mixture according to claim 8 or claim 9, wherein, in the reactive dye (B) of the formula (I), x is zero and the group  $R^1$  is substituted by at least one of a sulphonic acid group and the group  $-SO_2CH_2SO_2Q^1$ , wherein  $Q^1$  is as defined in claim 1.

11. A dye mixture according to claim 8 or claim 9, wherein, in the reactive dye (B) of the formula (I), each of x, y and z is 1, each of  $L^1$  and  $L^2$  is NH,  $R^{40}$  is the group Het, where Het is a triazine ring substituted by a halogen atom and  $R^{41}$  is an optionally substituted phenyl group.

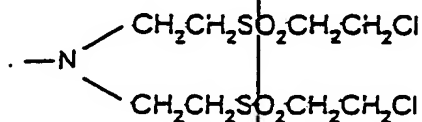
12. A dye mixture according to claim 8 or claim 9, wherein, in the reactive dye (B) of the formula (I), each of x and z is 1, y is zero,  $L^2$  is NH and  $R^{42}$  is the group Het, where Het is a difluorochloropyrimidinyl group.

13. A dye mixture according to claim 8 or claim 9, wherein, in the reactive dye (B) of the formula (I), each of x and z is 1, y is zero,  $L^2$  is CONH (in which the nitrogen atom is attached to the group  $R^1$  and the carbon to the group  $R^{41}$ ) and  $R^{41}$  is the group Het, where Het is a 2,3-dichloroquinoxaline group.

14. A dye mixture according to any one of claims 8 to 13, wherein, in the reactive dye (B) of the formula (I),  $R^2$  is a

phenyl or naphthyl group substituted by at least one of a sulphonic acid group and the group  $-\text{SO}_2\text{CH}_2\text{SO}_2\text{Q}^2$ , where  $\text{Q}^2$  is as defined in claim 1.

15. A dye mixture according to any one of claims 8 to 13, wherein, in the reactive dye (B) of the formula (I),  $\text{R}^2$  is a phenyl or naphthyl group substituted at least by the group  $\text{NH-Het}$ , where Het is a triazine ring substituted by a halogen atom and optionally substituted by the group



16. A dye mixture according to any one of claims 8 to 15, wherein, in the reactive dye (B) of the formula (I), the group  $\text{R}^1$  is substituted by a hydroxy group ortho to the azo group and the reactive dye (B) is in the form of a copper complex.

17. A dye mixture according to any one of claims 1 to 7, wherein the reactive dye (B) is monoazo or disazo dye of the formula (II), given and defined in claim 1.

18. A dye mixture according to claim 17, wherein, in the reactive dye (B) of the formula (II), the group  $\text{R}^5$  is an aryl group selected from phenyl and naphthyl groups each substituted by at least one sulphonic acid group or a salt thereof or by a

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group Het, wherein Het is a vinylsulphonyl group or a group  $\text{SO}_2\text{CH}_2\text{CH}_2\text{Q}^1$  in which  $\text{Q}^1$  is as defined in claim 1.

19. A dye mixture according to claim 16 or claim 18, wherein, in the reactive dye (B) of the formula (II), m is 1, which dye is a monoazo dye.

20. A dye mixture according to claim 19, wherein, in the reactive dye (B) of the formula (II), each of  $w_1$ ,  $w_2$ , p and q is zero,  $w_3$  is at least 2, at least one of the groups  $\text{R}^3$  is a sulphonic acid group and the group  $\text{R}^5$  is an aryl group selected from phenyl and naphthyl groups each substituted by a vinylsulphonyl group or a group  $-\text{SO}_2\text{CH}_2\text{CH}_2\text{Q}^1$ , where  $\text{Q}^1$  is as defined in claim 1.

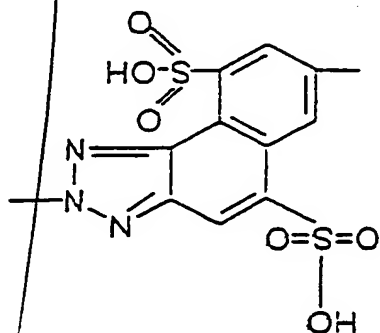
21. A dye mixture according to claim 19, wherein, in the reactive dye (B) of the formula (II), each of  $w_1$  and  $w_2$  is zero, each of p and q is 1,  $\text{R}^{21}$  is hydrogen and  $\text{R}^4$  is selected from a triazine ring substituted by at least one halogen atom and optionally additionally substituted by an amino group; and a pyrimidine group substituted by at least one halogen atom and optionally additionally substituted by a methyl group.

22. A dye mixture according to claim 19, wherein, in the reactive dye (B) of the formula (II), each of  $w_1$ ,  $w_2$ , p and q is 1,  $\text{R}^{20}$  is hydrogen, Het is a triazine ring substituted by a

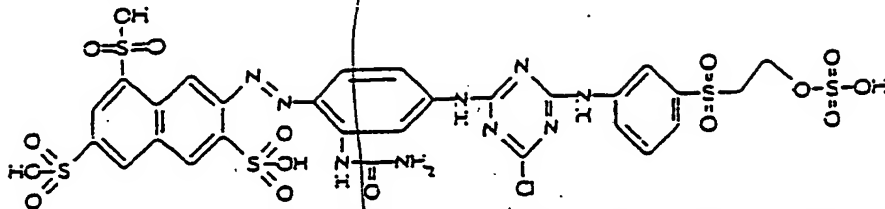
halogen atom,  $R^{21}$  is hydrogen and  $R^4$  is selected from a phenyl group or a group  $-SO_2CH_2CH_2Q^1$ , where  $Q^1$  is as defined in claim 1, and a straight or branched  $C_{2-4}$  alkylene chain substituted by a substituent selected from a hydroxyl group; a sulphonic acid group or salt thereof; a vinylsulphonyl group, a group  $-SO_2CH_2CH_2Q^2$ , where  $Q^2$  is as defined in claim 1; and a pyrimidinylamino group in which the pyrimidinyl group is substituted by at least one halogen atom and optionally additionally by a methyl group; and which straight or branched  $C_{2-4}$  alkylene group optionally contains a hetero atom selected from O, S and N(H).

23. A dye mixture according to claim 19, wherein, in the reactive dye (B) of the formula (II), each of  $w_1$  and  $w_2$  is zero, each of p and q is 1 and each of  $R^{21}$  and  $R^4$  is the group  $OSO_3H$ .

24. A dye mixture according to claim 19, wherein, in the reactive dye (B) of the formula (II),  $w_1$  is zero,  $w_2$  is 1, p is 1, q is 1,  $R^{21}$  is hydrogen,  $R^4$  is a pyrimidinyl group substituted by at least one halogen atom and optionally additionally substituted by a methyl group and Het is a non-reactive heterocyclic group of the formula



25. A dye mixture according to claim 19, which contains a dye of the formula (44)



26. A dye mixture according to any one of claims 1 to 7, wherein the reactive dye (B) is a monoazopyridone dye of the formula (III), given and defined in claim 1.

27. A dye according to claim 26, wherein, in the reactive dye (B) of the formula (III), each of  $r$ ,  $s_1$  and  $s_2$  is 1, each of  $L^1$  and  $L^2$  is NH,  $R^{40}$  is a triazine ring substituted by a halogen atom and  $R^{41}$  is selected from a phenyl group substituted by at least one of a chlorine atom, a sulphonic acid group or a salt thereof, a vinylsulphonyl group or a group  $-SO_2CH_2CH_2Q^1$ , where  $Q^1$  is as defined in claim 1; and a straight or branched chain  $C_{2-4}$  alkylene group optionally containing at least one oxygen atom and substituted by a vinylsulphonyl group or a group  $-SO_2CH_2CH_2Q^1$ , where  $Q^1$  is as defined in claim 1.

28. A dye mixture according to claim 26, wherein, in the reactive dye (B) of the formula (III), each of  $r$  and  $s_1$  is 1,  $s_2$  is zero,  $L^2$  is NH,  $R^{41}$  is a pyrimidinyl group substituted by at least one halogen atom and optionally additionally substituted by a methyl group and  $R^{40}$  is a naphtho-(1,2-d)-1,2,3-triazole substituted by at least one sulphonic acid group or salt thereof.

29. A dye mixture according to claim 26, wherein, in the reactive dye (B) of the formula (III), each of  $r_1$ ,  $s_1$  and  $s_2$  is 1,  $L^1$  is CONH (in which the carbon atom is attached to the group  $R^{40}$ ),  $L^2$  is NH,  $R^{40}$  is an optionally substituted phenyl group and  $R^{41}$  is a pyrimidinyl group substituted by at least one halogen atom and optionally additionally substituted by a methyl group.

30. A dye mixture according to any one of claims 1 to 7, wherein the reactive dye (B) is a monoazonaphthyl dye of the formula (IV), given and defined in claim 1.

31. A dye mixture according to claim 30, wherein, in the reactive dye (B) of the formula (IV),  $x$  is zero,  $d$  is 1 and  $a$  or  $b$  is 1.

32. A dye mixture according to claim 31, wherein  $e$  is zero.

33. A dye mixture according to claim 30, wherein, in the reactive dye (B) of the formula,  $x$  is 1,  $y$  is zero,  $z$  is 1,  $L^2$  is NH and  $R^{41}$  is a pyrimidinyl group substituted by at least one halogen atom and optionally additionally substituted by a methyl group.

34. A dye mixture according to claim 30, wherein, in the reactive dye (B) of the formula (IV), x is 1, y is zero, z is 1, L<sup>2</sup> is CONH (with the carbon atom attached to the group R<sup>1</sup> and the nitrogen atom to the group R<sup>41</sup>) and R<sup>41</sup> is a phenyl group substituted by a vinylsulphonyl group or a group -SO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Q<sup>1</sup>, where Q<sup>1</sup> is as defined in claim 1.

35. A dye mixture according to claim 30, wherein, in the reactive dye (B) of the formula (IV) each of x, y and z is 1, each of L<sup>1</sup> and L<sup>2</sup> is NH, R<sup>40</sup> is a triazine ring substituted by a halogen atom and R<sup>41</sup> is an aromatic group selected from phenyl and naphthyl groups each substituted by at least one of a sulphonic acid group or a salt thereof, a vinylsulphonyl group and the group -SO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Q<sup>1</sup>, where Q<sup>1</sup> is as defined in claim 1.

36. A dye mixture according to any one of claims 33 to 35, wherein e is zero.

37. A dye mixture according to claim 30, wherein, in the reactive dye (B) of the formula (IV), e is 1, c is zero, L<sup>3</sup> is CONH (where either the nitrogen or carbon atom thereof is attached to the group R<sup>9</sup>) and R<sup>9</sup> is a methyl group.

38. A dye mixture according to claim 30, wherein, in the reactive dye (B) of the formula (IV), e is 1, c is zero, L<sup>3</sup> is CONH (where either the nitrogen or carbon atom thereof is

attached to the group  $R^9$ ) and  $R^9$  is a phenyl group optionally substituted by at least one substituent, the or each substituent being selected from methoxy, carboxyethyl, sulphoethyl, carboxyethenyl, 1,2-dibromoalkyl, chloroethylsulphonyl, vinylsulphonyl, a group of the formula  $-SO_2CH_2CH_2Q^1$ , where  $Q^1$  is as defined in claim 1 and a 2,3-dichloroquinoxaline group.

39. A dye mixture according to claim 30, wherein, in the reactive dye (B) of the formula (IV), e is 1, c is 1,  $L^3$  is CONH (where either the nitrogen or carbon atom thereof is attached to the group  $R^9$ ),  $R^9$  is a phenyl group substituted at least by the group  $L^4-R^{35}$ , where  $L^4$  is NH and  $R^{35}$  is a vinyl group optionally substituted by a halogen atom or a pyrimidinyl group substituted by a halogen atom and optionally additionally substituted by a methyl group.

40. A dye mixture according to claim 30, wherein, in the reactive dye (B) of the formula (IV), e is 1, c is zero,  $L^3$  is  $N(R^{20})$ , where  $R^{20}$  is as defined in claim 1 and  $R^9$  is a vinylsulphonyl group, a group  $-SO_2CH_2CH_2Q^1$  wherein  $Q^1$  is as defined in claim 1, or a pyrimidinyl group substituted by a halogen atom and optionally additionally substituted by a methyl group.

41. A dye mixture according to claim 40, wherein, in the group  $N(R^{20})$ ,  $R^{20}$  is a halogen atom or a methyl group.



42. A dye mixture according to claim 30, wherein, in the reactive dye (B) of the formula (IV), e is 1, c is zero,  $L^3$  is  $N(R^{20})$ , where  $R^{20}$  is as defined in claim 1 and  $R^9$  is a triazine ring substituted by at least one halogen atom.

43. A dye mixture according to claim 42, wherein the triazine ring is substituted by two halogen atoms.

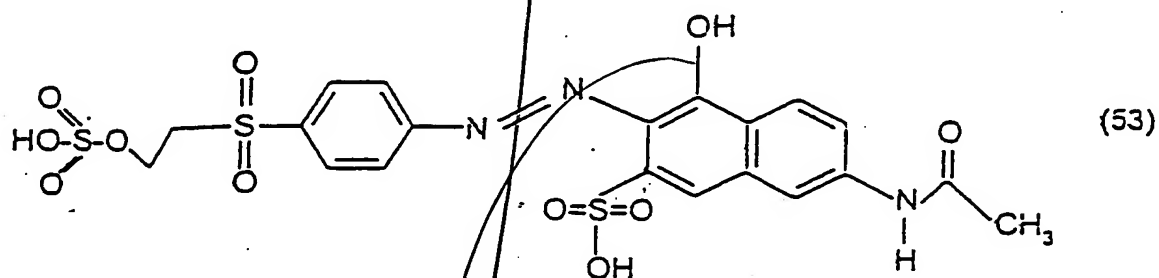
44. A dye mixture according to claim 42, wherein the triazine ring is substituted by one halogen atom and a morpholinyl group.

45. A dye mixture according to claim 30, wherein, in the reactive dye (B) of the formula (IV), e is 1, c is 1,  $L^3$  is  $N(R^{20})$ , where  $R^{20}$  is as defined in claim 1,  $L^4$  is the group  $R^{21}$ , where  $R^{21}$  is as defined in claim 1 and  $R^{35}$  is selected from a phenyl group optionally substituted by a sulphonic acid group or salt thereof, a halogen atom, a vinylsulphonyloxyalkyl group, a vinylsulphonyl group or the group  $-SO_2CH_2CH_2Q^1$ , where  $Q^1$  is as defined in claim 1; and a  $C_{1-4}$  alkyl group optionally substituted by a vinylsulphonyl group, the group  $-SO_2CH_2CH_2Q^1$ , where  $Q^1$  is as defined in claim 1, a sulphonic acid group or a salt thereof or a chloroalkylsulphonyl group, which  $C_{1-4}$  alkyl group optionally additionally contains at least one oxygen or sulphur atom in the chain thereof.

46. A dye mixture according to any one of claims 37 to 45, wherein x is zero.

47. A dye mixture according to any one of claims 30 to 46, wherein, in the reactive dye (B) of the formula (IV), each of the groups  $R^1$  and the naphthalene nucleus is substituted by a respective hydroxyl group ortho to the azo group and the reactive dye (B) is in the form of a copper complex thereof.

48. A dye mixture according to claim 30, which contains a dye of the formula (53)



49. A dye mixture according to any one of claims 1 to 7, wherein the reactive dye (B) is a disazo dye of the formula (V), given and defined in claim 1.

50. A dye mixture according to claim 49, wherein, in the reactive dye (B) of the formula (V), V is amino, W is hydroxy, each of  $R^1$  and  $R^{14}$  is a phenyl group substituted by at least one substituent, the or each substituent independently being selected from a sulphonic acid group or a salt thereof, a

vinylsulphonyl group and a group  $\text{SO}_2\text{CH}_2\text{CH}_2\text{Q}^1$ , where  $\text{Q}^1$  is as defined in claim 1 and  $\text{R}^{14}$  is optionally additionally substituted by at least one methoxy group.

51. A dye mixture according to claim 49 or claim 50, wherein, in the reactive dye (B) of the formula (V), each of x and h is zero.

52. A dye mixture according to claim 49 or claim 50, wherein, in the reactive dye (B) of the formula (V), at least one of x and h is 1.

53. A dye mixture according to claim 52, wherein, each of x and h is 1.

54. A dye mixture according to claim 50, wherein each of x, y and z is 1, each of  $\text{L}^1$  and  $\text{L}^2$  is  $\text{NH}$ ,  $\text{R}^{40}$  is a triazine ring substituted by a halogen atom and  $\text{R}^{41}$  is a phenyl group substituted by at least one substituent, the or each substituent independently being selected from a sulphonic acid group or a salt thereof, a vinylsulphonyl group and a group  $\text{SO}_2\text{CH}_2\text{CH}_2\text{Q}^1$ , where  $\text{Q}^1$  is as defined in claim 1.

55. A dye mixture according to any one of claims 50 and 52 to 54, wherein each of f, g and h is 1, each of  $\text{L}^3$  and  $\text{L}^4$  is  $\text{NH}$ ,  $\text{R}^{51}$  is a triazine ring substituted by a halogen atom and  $\text{R}^{52}$  is

a phenyl group substituted by at least one substituent the or each substituent independently being selected from a halogen atom, a sulphonic acid group or a salt thereof, a vinylsulphonyl group and a group  $\text{SO}_2\text{CH}_2\text{CH}_2\text{Q}^1$ , where  $\text{Q}^1$  is as defined in claim 1.

56. A dye mixture according to claim 49, wherein, in the reactive dye (B) of the formula (V), V is amino, W is hydroxy, h is zero and  $\text{R}^{14}$  is a naphthalene group substituted by at least one sulphonic acid group.

57. A dye mixture according to claim 56, wherein each of x, y and z is 1,  $\text{R}^1$  is a phenyl group optionally substituted by a sulphonic acid group or a salt thereof, each of  $\text{L}^1$  and  $\text{L}^2$  is NH,  $\text{R}^{40}$  is a triazine ring substituted by a halogen atom and  $\text{R}^{41}$  is a phenyl group substituted by at least one substituent, the or each substituent independently being selected from a sulphonic acid group or a salt thereof, a vinylsulphonyl group and a group  $\text{SO}_2\text{CH}_2\text{CH}_2\text{Q}^1$ , where  $\text{Q}^1$  is as defined in claim 1.

58. A dye mixture according to claim 49, wherein, in the reactive dye (B) of the formula (V), V is amino, W is hydroxy, h is 1, f is zero, g is 1,  $\text{L}^4$  is NH and  $\text{R}^{52}$  is the group  $\text{Het}^3$ , where  $\text{Het}^3$  is a substituted aromatic heterocyclic group.

59. A dye mixture according to claim 58, wherein the group  $\text{Het}^3$  is a pyrimidinyl group substituted by at least one halogen atom and optionally additionally substituted by a methyl group.

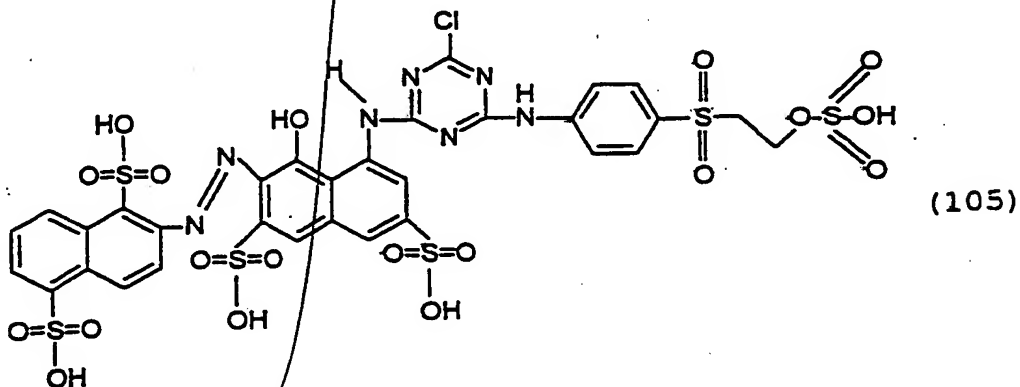
60. A dye mixture according to claim 59, wherein x is zero and  $R^1$  is a phenyl group substituted by a vinylsulphonyl group or  $SO_2CH_2CH_2Q^1$ , where  $Q^1$  is as defined in claim 1.

61. A dye mixture according to claim 49, wherein, in the reactive dye (B) of the formula (V), V is amino, W is hydroxy, h is 1, f is zero, g is 1,  $L^4$  is  $NHCO$  (where either the nitrogen or carbon atom thereof is attached to the group  $R^{14}$ ) and  $R^{52}$  is the group  $Het^3$ , where  $Het^3$  is a reactive group having an aliphatic chain.

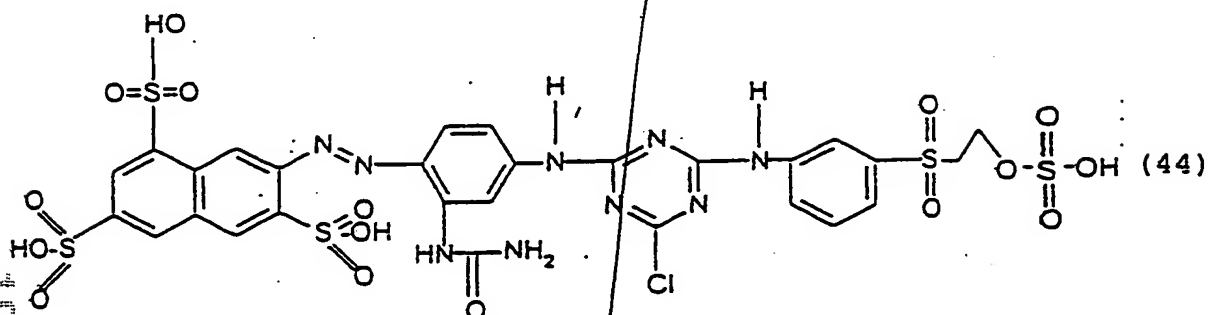
62. A dye mixture according to claim 61, wherein the group  $Het^3$  is a vinylsulphonyl group or  $SO_2CH_2CH_2Q^1$ , where  $Q^1$  is as defined in claim 1.

63. A dye mixture according to claim 62, wherein x is zero and  $R^1$  is a phenyl group substituted by a vinylsulphonyl group or  $SO_2CH_2CH_2Q^1$ , where  $Q^1$  is as defined in claim 1.

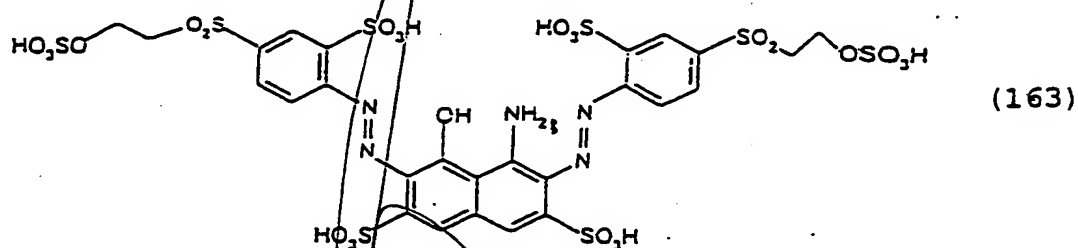
64. A dye mixture according to claim 49, which contains a dye of the formula (105)



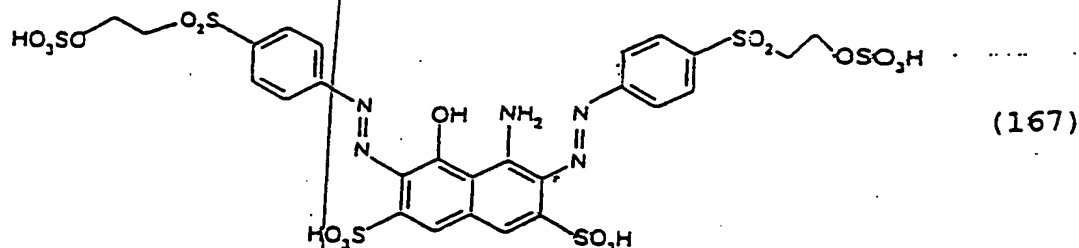
65. A dye mixture according to claim 64, which additionally contains a dye of the formula (44)



66. A dye mixture according to claim 49, which contains a dye of the formula (163)



67. A dye mixture according to claim 49, which contains a dye of the formula (167)



68. A dye mixture according to claim 66 or 67, which contains each of the dyes of the formulae (163) and (167).

69. A dye mixture according to any one of claims 1 to 7, wherein the reactive dye (B) is a formazan dye of the formula (VI) given and defined in claim 1.

70. A dye mixture according to claim 69, wherein, in the reactive dye (B) of the formula (VI), each of u and v is zero, i is 1,  $R^{16}$  is a sulphonic acid group or a salt thereof, j is 2 and one  $R^{17}$  is a sulphonic acid group or a salt thereof and the other  $R^{17}$  is a vinylsulphonyl group or  $SO_2CH_2CH_2Q^1$ , where  $Q^1$  is as defined in claim 1.

71. A dye mixture according to claim 69, wherein, in the reactive dye (B) of the formula (VI), v is zero, i is 1,  $R^{16}$  is a sulphonic acid group or a salt thereof, j is 1,  $R^{17}$  is a sulphonic acid group, u is 1 and  $Het^1$  is a triazine ring substituted by a halogen atom.

72. A dye mixture according to claim 71, wherein each of k and l is zero, t is 1 and  $R^{61}$  is a phenyl group substituted by at least one sulphonic acid group or a salt thereof.

73. A dye mixture according to claim 71, wherein each of k, l and t is 1, each of  $R^{60}$  and  $R^{61}$  independently is a phenyl group

substituted by at least one sulphonic acid group or a salt thereof and Het<sup>2</sup> is a triazine ring substituted by a halogen atom.

74. A dye mixture according to claim 71, wherein each of k and t is zero, l is 1 and Het<sup>2</sup> is a reactive group having an aliphatic chain.

75. A dye mixture according to any one of claims 1 to 7, wherein the reactive dye (B) is a disazo dye of the formula (VIII), given and defined in claim 1.

76. A dye mixture according to claim 75, wherein

R<sup>55</sup> is a naphthyl group;

R<sup>56</sup> is a sulphonic acid group or a salt thereof;

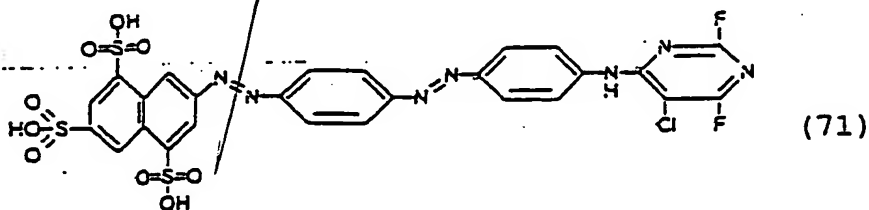
R<sup>59</sup> is a group L<sup>10</sup>-Het, where L<sup>10</sup> is the group N(H)-

and Het is a reactive heterocyclic group substituted by at least one halogen atom;

y<sub>1</sub> is 1, 2 or 3; and

each of y<sub>2</sub>, y<sub>3</sub> and y<sub>4</sub> is zero.

77. A dye of the formula





78. A dye mixture according to claim 75, wherein

$R^{55}$  is a phenyl group;

the group  $R^{56}$  or each group  $R^{56}$  independently is a sulphonic acid group or a salt thereof or is a reactive group selected from a vinyl sulphonyl group and a group  $SO_2CH_2CH_2Q^2$  in which  $Q^2$  is as defined in claim 1;

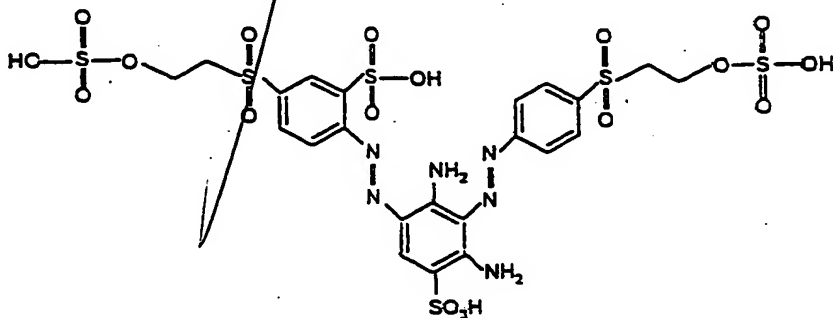
$y_1$  is 1 or 2; and,

at least one group  $R^{56}$  is a said reactive group or the group  $R^{59}$  is or includes a reactive group.

79. A dye mixture according to claim 78, wherein at least one group  $R^{56}$  or the group  $R^{59}$  is a reactive group selected from a vinyl sulphonyl group and a group  $SO_2CH_2CH_2Q^2$  in which  $Q^2$  is as defined in claim 1.

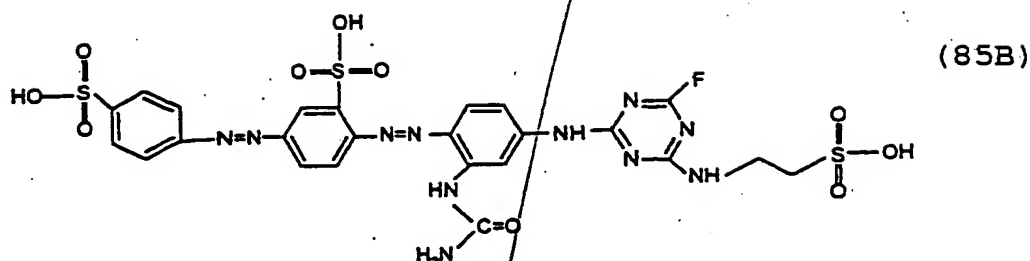
80. A dye mixture according to claim 78, wherein at least one group  $R^{56}$  is a sulphonic acid group or a salt thereof and  $R^{59}$  is the group  $L^{10}-Het$ , where  $L^{10}$  is the group  $N(H)-$  and  $Het$  is a reactive triazine group substituted by a halogen atom and additionally, by the group  $NHCH_2CH_2SO_3H$ .

81. A disazo dye of the formula



(85A)

82. A disazo dye of the formula



83. A dye mixture according to any one of claims 1 to 7, wherein the reactive dye (B) is a phthalocyanine dye of the formula (X), given and defined in claim 1.

84. A dye mixture according to claim 83, wherein, in the reactive dye (B) of the formula (X), respective average values of  $x_1$ ,  $x_2$  and  $x_3$  are  $x_1$  is 3,  $x_2$  is zero and  $x_3$  is 1, three of the four isoindole rings of the phthalocyanine have a respective sulphonic acid substituent (or a salt thereof) thereon and the other isoindole ring has a group  $\text{SO}_2\text{NH-B-NH-Het}$  substituted thereon.

85. A dye mixture according to claim 84, wherein B is a straight or branched  $\text{C}_{2-4}$  alkylene group and Het is a triazine ring substituted by at least one halogen atom and optionally additionally substituted by a methoxy group.

86. A dye mixture according to any one of claims 1 to 7, wherein the reactive dye (B) is a triphendioxazine dye of the

87. A dye mixture according to claim 86, wherein, in the reactive dye (B) of the formula (XI), each of T<sup>1</sup> and T<sup>2</sup> is a halogen atom, each U<sup>1</sup> is a sulphonic acid group or a salt thereof, each of B<sup>1</sup> and B<sup>2</sup> independently is a straight or branched C<sub>2-4</sub> alkylene group, each of Het<sup>1</sup> and Het<sup>2</sup> independently is a triazine ring substituted by a halogen atom and each of R<sup>80</sup> and R<sup>81</sup> independently is a phenyl group substituted by at least one sulphonic acid group or a salt thereof.

*adrian*